Personal Resume

1. Name: Dr. (Mrs.) KRISHNA PRAMANIK

2. Designation: Professor

3. Department: Biotechnology & Medical Engineering

4. Research Area: Nanobiotechnology / Nanomedicine, Fermentation; Bioprocess Engineering Biomaterial & Tissue Engineering; Reaction Engineering; Bio energy

Modeling & Simulation of Biological Reactions; Environmental Biotechnology

5. Qualification: B.Tech, M.Tech, Ph.D.

6. Career Outline:

- National Institute of Technology, Rourkela as Professor since July 2007
- National Institute of Technology, Warangal as Assistant Professor since March 1999-July, 2007
- Pravara Rural Engg. College, Loni Assistant Professor-March1996-March 1999
- Council of Scientific & Industrial Research SRF (Engg.)- July1991- August1996
- M/s Allied Resins & Chemicals Ltd. Technical Officer (Res. & Lab)-May1987-July 1991

7. Awards/Recognition

- Women Scientist Award & Gold Medal -Ministry of Non-conventional Energy Sources, Govt. of India - 2002.
- The Sir Ganga Ram Memorial Award & Gold Medal —The Institution of Engineers India-2005
- Best paper presentation award Indian Chemical Engineering Congress (CHEMCON) 2000
- Honorary Member of Women Advisory Board of American Biographical Institute 2004
- Council member of Ind. Chemical Society (2004-2006)

8. Members of learned societies and national bodies:

Life Member (LM-10539) of The Indian Institute of Chemical Engineers Life Member (LM-18779) of The Indian Society for Technical Education

Life Member (F-4632) of the Indian Chemical Society

Life Member (LM-60738) of the Institution of Engineers (India) Life Member (LM-0990/2002) of The Solar Energy Society of India

Executive member of Institution of Engineers (India) Warangal Local Chapter 2005-2006

9. Overseas Visit:

USA, Thailand, Austria, New Zealand, Singapore

10.On going sponsored research projects

Project title: Optimization of Ethanol Production from Agrowaste

Funding agency: DBT Project Cost: Rs.10.93 Lakhs

Principal investigator: Dr. K.Pramanik

Project title: Preparation, characterization & use of bio-based scaffolds for cell growth in

bioreactor-

Funding agency: NIT Rourkela Project Cost: Rs. 02 Lakh

Principal investigator: Dr. K.Pramanik

11. Referee

- Institution of Engineers (India) J.
- Ind. Chem. Soc. J

12. Continuing Education Activities

- Coordinated UGC sponsored workshop "Capacity Building of Women Managers in higher Education" July 2006.
- Organised the TEQIP sponsored workshop on Women and Academic Leadership (WAAL 2006) on 18th March, 2006
- Coordinated Indian Chemical Engineering Student Congress—(IChESCON 06) during 20-21 January, 2006
- Coordinated National Level Technical Symposium-VIKIRAN-04 during 12-13th March, 2004
- Organized a seminar in the name of Pidilite Industries Ltd to commemorate the Best Student Chapter Award Conferred by the IIChE, to IIChE student Chapter N.I.T. Warangal on 12th March, 2004.
- Coordinated National Level Technical Symposium –CHEM QUEST- 2002 during 8-9th March, 2002
- Coordinated AICTE/ISTE-STTP on "Computer Control of Chemical Processes"- CCCP-2001 during 11-23, June-2001

12. Publications (Total No. 31)

Publication in Journal

International

- 1. **K. Pramanik**, "Properties and Use of J. Curcas oil and Diesel fuel blends in CI Engine, J. Renewable Energy, Elsever Science Vol 28/2 pp-119-128, 2003
- 2. **K. Pramanik** "Parametric Studies on Batch Alcohol Fermentation using Saccharomyces Yeast Extracted from Toddy" J. of Chinese Inst. Chem. Engrs. Vol. 34, No. 4, p1-6, 2003.
- 3. **K. Pramanik**, "Preparation and evaluation of methyl ester of jatropha curcas oil for use in diesel engine" accepted for publication in J. Renewable Energy, Elsevier Science.
- **4.** T. Das & K. Pramanik "Modeling and Performance Evaluation of Solar Water Heating Systems" accepted for publication in J. Renewable Energy, Elsevier Science

National

- 5. **K. Pramanik**, "A Study on Ethanol Production from the Mixture of Waste Pine Apple and Banana Peel in Slurry Fermenter" J. Indian Chem Engr.Vol47, No.2, p115-118, 2005.
- 6. **K. Pramanik** and D. Eswar Rao, "A kinetic study on the ethanol fermentation of grape waste using S.C yeast extracted from toddy" J. of The Institution of Engineers (India) Vol. 85, p53-58, 2005.
- 7. **K. Pramanik**, "Use of Artificial Neural Networks for Prediction of Cell Mass and Ethanol Concentration in Batch Fermentation of Grape Waste using *Saccharomyces Cerevisiae* Yeast "J. of The Institution of Engineers (India) Vol. 85, p31-35, 2004.
- 8. N.K. Das and **K. Pramanik**, "Side-chain Alkylation of Toluene with Methanol Over Single Zeolite Catalysts", J. Indian Chem. Soc. Vol. 74, p701-705, Sept. 1997.
- 9. N.K. Das and **K. Pramanik**, "Side-chain Alkylation of Toluene with Methanol Over Dual Catalysts Comprising X-zeolite and Fe-Mo Catalyst", J. Indian Chem. Soc. Vol. 74, p705-708, Sept. 1997.
- 10. K. Pramanik and K. Kadam. "A study on continuous molasses Fermentation by Saccharomyces Yeast", Chemical Weekly –Vol 43, July, p149-151, Aug.18,1998.

- 11. **K. Pramanik**, Deepak Aggarwal and Ashish C. "Biofuel as an alternative source to diesel and gasoline", Chemical Weekly-Vol 44(14), p153-156, December1, 1998.
- 12. **K. Pramanik**, and R.W. Gaikwad "Utilisation of Waste Liquor Of Pentaerythritol manufacture as Reducing Agent for the preparation of Chrome Tanning Material", Chemical Weekly, Vol 44(21) p165-167, January19, 1999.
- 13. **K. Pramanik**, "Development of Neutralizing Agent for Chrome Tanning Leather from the Waste Liquor of Pentaerithritol Manufacture", Chemical Weekly, Vol 45(11), Nov. 9, 1999.
- 14. **K. Pramanik**, V. Gondkar, B. Tambe & K. Kadam, "Egg processing: To manufacture hole Egg powder", J. Chemical Weekly –Vol 43(33) p.153- 155, April 14, 1998.

Publication in Conference Proceedings

International

- K. Pramanik & GG. Tesfaldet "Optimization of Blend of Industrial Solid Wastes as Feedstock for Gasification Process" proceeding World Renewable Energy Congress VIII, held in Florence Italy, 21-24 August, 2006
- 2. T. Das & **K. Pramanik** "Modeling and Performance Evaluation of Solar Water Heating Systems" proceeding World Renewable Energy Congress VIII, held in Denver, Colorado, USA, during August 28 September 3, 2004,
- K. Pramanik "Properties and use of Methyl ester of Jatropha Curcas Oil in Compression Ignition Engine" proceeding World Renewable Energy Congress VIII, held in Denver, Colorado, USA, during Aug 28 – Sept. 3, 2004,
- 4. **K. Pramanik**, "Parametric Studies on Batch Alcohol Fermentation using Saccharomyces Yeast Extracted from Toddy" Proceeding 9th Asian Pacific Confederation of Chemical Engineering Congress (**APCChe-2002**), Christchurch, New Zealand, September- 2002.
- 5.S. Phani Kiran & **K.Pramanik**" Modelling of Solute and Solvent Transport Through a Batch Reverse Osmosis Membrane for Desalination of Water" Proceeding International Conference on Advanced Modelling Techniques for Sustainable Management of Water Resources (AMTSMW-2004)" at NIT Warangal 28-30, January 2004.
- 6 **K.Pramanik**, "Biogas Generation From Paper and Pulp Mill Waste-A Case Study" proceeding FOREN-2000 organised by WEC, Regional Energy Forum, Romania-2000.
- 7.**K. Pramanik** "Microbial Biodegradation of Petroleum oil sludge" accepted for oral presentation at the Kuwait First International Petrochemicals Conference & Exhibition Radisson SAS, Kuwait during 12 14 december, 2005

National

- 8. **K. Pramanik**, M. Mukundavani "Lipase-catalysed Transesterification Of Vegetable Oil: Identification of Lipase Producing Fungi and Optimization Of Medium Composition" Proceedings Indian Chemical Engineering Congress –2004.
- 9. B. Jeevan, Ch. Venkateswarulu and K.**Pramanik** "Inferential Control of Multicomponent Reactive Batch Distillation"- Proceedings Indian Chemical Engineering Congress –2004.
- 10. L. Prasanna Laxmi and **K. Pramanik**, "Modelling and Simulation of Batch Alcohol Fermenter Proceeding using ANN" Indian Chemical Engineering Congress (CHEMCON)-2002.
- 11. **K. Pramanik**, L.Prasanna Laxmi and Kara Srinivas, "Kinetics of Fermentation of Grape Waste by Saccharomyces Cerevisiae Yeast: Experimental Studies and Mathematical Modeling" Proceeding in Indian Chemical Engineering Congress (CHEMCON)-2003.
- 12.**K.Pramanik**, K.Srivani & V. Ravi Chandra "Catalytic Studies on Trans-esterification of Jatropha Oil for use as Diesel Fuel"- Proceedings Indian Chemical Engineering Congress 2000, Vol –1, pp-TRE-29-32.
- 13. **K. Pramanik**, "VOC removal by Biofiltration–An Overview" Proceeding World Congress on Sustainable Development, organized by The Institution of Engineers (I), Calcutta, Jan., 2000.
- **14.K. Pramanik**, "Biomethanisation of Distillery Waste A Case Study" Proceeding Indian Chemical Engineering Congress (CHEMCON)-1999.

- 15. **K.Pramanik**, "Renewable Energy Environment And Sustainable Development R&D Perspective" Proceeding 1st National convention of Women Engineers, organized by the Institution of Engineeres (India), Pune local Centre, October- 2001.
- 16. **K.Pramanik**, "Role of Women Engineers in Sustainable Development with special Reference to Bioenergy for Rural Population" Proceeding-National Seminar on Women in Technical Education organized by the Energy Centre, Maulana Azad College of Tech., Bhopal 2001.
- 17.**K.Pramanik**, "Energy conservation in Chlor-Alkali Industry" proceeding- Chemical Engineering Research & Development in Economical and Ecofriendly Processes, Golden Jubilee Celebration, IIChE, Madras 1997.